

What is claimed is:

1. An image-processing method comprising the steps of:

reconstructing an image which has a resolution  
5 differing from a reference-resolution, based on an image signal  
subjected to a multiple-resolution transformation process; and  
calculating an image-processing parameter, based on  
a reference-processing parameter employed in performing a  
predetermined image-processing process on a reference-  
10 resolution image having said reference resolution, said  
image-processing parameter being employed in performing said  
predetermined image-processing process on the reconstructed  
image and causing the image characteristics of said  
reconstructed image subjected to said predetermined image-  
15 processing process to be substantially the same as the image  
characteristics of said reference-resolution image subjected  
to said predetermined image-processing process.

2. The image-processing method as set forth in claim  
1, wherein said image signal is subjected to said multiple-  
20 resolution transformation process so that the resolution of each  
image is  $2^k$  (where  $k$  is an integer) times that of said  
reference-resolution, and the image-size of each image is  $2^{2k}$   
times the image-size of said reference-resolution image; and  
said reconstructed image is an image having a  
25 resolution which does not fall within the  $2^k$  times range of said  
reference-resolution.

3. The image-processing method as set forth in claim 1, wherein said reconstructed image subjected to said predetermined image-processing process is further converted to an image having a desired image-size.

5 4. The image-processing method as set forth in claim 2, wherein said reconstructed image subjected to said predetermined image-processing process is further converted to an image having a desired image-size.

10 5. The image-processing method as set forth in claim 2, wherein said reconstructing is performed so that the image-size of said reconstructed image is  $2^{2k}$  times the image-size of said reference-resolution image, close to the image-size of an image which is to be reproduced and output as a visible image; and

15 an image subjected to said predetermined image-processing process is further subjected to a zoom process so that it becomes equal in size to the image-size of said output image.

20 6. The image-processing method as set forth in claim 1, wherein said reference-processing parameter is stored in correlation with said image signal.

7. The image-processing method as set forth in claim 2, wherein said reference-processing parameter is stored in correlation with said image signal.

25 8. The image-processing method as set forth in claim 3, wherein said reference-processing parameter is stored in

correlation with said image signal.

9. The image-processing method as set forth in claim 5, wherein said reference-processing parameter is stored in correlation with said image signal.

5 10. The image-processing method as set forth in claim 1, wherein said image-processing parameter is calculated based on the characteristic of said multiple-resolution transformation process.

10 11. The image-processing method as set forth in claim 2, wherein said image-processing parameter is calculated based on the characteristic of said multiple-resolution transformation process.

15 12. The image-processing method as set forth in claim 3, wherein said image-processing parameter is calculated based on the characteristic of said multiple-resolution transformation process.

20 13. The image-processing method as set forth in claim 5, wherein said image-processing parameter is calculated based on the characteristic of said multiple-resolution transformation process.

14. The image-processing method as set forth in claim 6, wherein said image-processing parameter is calculated based on the characteristic of said multiple-resolution transformation process.

25 15. An image-processing system comprising:  
reconstruction means for reconstructing an image

which has a resolution differing from the reference-resolution,  
based on an image signal subjected to a multiple-resolution  
transformation process;

image-processing means for performing a  
5 predetermined image-processing process on the reconstructed  
image; and

parameter-setting means for deriving an image-  
processing parameter, based on a reference-processing parameter  
employed in performing a predetermined image-processing process  
on a reference-resolution image having said reference-  
10 resolution, and setting the derived image-processing parameter  
to said image-processing means, said image-processing parameter  
being employed in performing said predetermined image-  
processing process on said reconstructed image and causing the  
image characteristics of said reconstructed image subjected to  
15 said predetermined image-processing process to be substantially  
the same as the image characteristics of said reference-  
resolution image subjected to said predetermined image-  
processing process, approximately the same.

20 16. The image-processing system as set forth in claim  
15, wherein said image signal is subjected to said  
multiple-resolution transformation process so that the  
resolution of each image is  $2^k$  (where k is an integer) times that  
of said reference-resolution and an image-size of each image  
25 is  $2^{2k}$  times that of the image-size of said reference-resolution  
image; and

said reconstruction means obtains said reconstructed image having a resolution not falling within the  $2^k$  times range of said reference-resolution.

17. The image-processing system as set forth in claim 5 15, further comprising zoom-processing means for further converting said reconstructed image subjected to said predetermined image-processing process, to an image having a desired image-size.

18. The image-processing system as set forth in claim 10 16, further comprising zoom-processing means for further converting said reconstructed image subjected to said predetermined image-processing process, to an image having a desired image-size.

19. The image-processing system as set forth in claim 15 16, wherein said reconstruction means reconstructs an image so that the image-size of said image is  $2^{2k}$  times the image-size of said reference-resolution image, close to the image-size of an image which is reproduced and output as a visible image; and

zoom-processing means is further provided for 20 performing a zoom process on an image subjected to said predetermined image-processing, so that it becomes equal in size to the image-size of said output image.

20. The image-processing system as set forth in claim 15, wherein said parameter-setting means derives said 25 image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

21. The image-processing system as set forth in claim 16, wherein said parameter-setting means derives said image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

5 22. The image-processing system as set forth in claim 17, wherein said parameter-setting means derives said image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

10 23. The image-processing system as set forth in claim 19, wherein said parameter-setting means derives said image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

24. A computer readable storage medium recording a program to be executed by a computer, said program comprising:

15 a procedure for reconstructing an image having a resolution differing from the reference-resolution, based on an image signal subjected to a multiple-resolution transformation process;

20 a procedure for calculating an image-processing parameter, based on a reference-processing parameter employed in performing a predetermined image-processing process on a reference-resolution image having said reference-resolution, said image-processing parameter being employed in performing said predetermined image-processing on said reconstructed image  
25 and causing the image characteristics of said reconstructed image subjected to said predetermined image-processing to be

substantially the same as the image characteristics of said reference-resolution image subjected to said predetermined image-processing; and

a procedure for performing said predetermined image-processing process on said reconstructed image by use of said image-processing parameter.

25. The storage medium as set forth in claim 24, wherein said image signal is subjected to said multiple-resolution transformation process so that the resolution of each image is  $2^k$  (where  $k$  is an integer) times that of said reference-resolution, and the image-size of each image is  $2^{2k}$  times that of the image-size of said reference-resolution image; and

said reconstructing procedure is a procedure for obtaining said reconstructed image having a resolution not falling within the  $2^k$  times range of said reference-resolution.

26. The storage medium as set forth in claim 24 further comprising a procedure of further converting said reconstructed image subjected to said predetermined image-processing process, to an image having a desired image-size.

27. The storage medium as set forth in claim 25 further comprising a procedure of further converting said reconstructed image subjected to said predetermined image-processing, to an image having a desired image-size.

28. The storage medium as set forth in claim 24, wherein said reconstructing means is a procedure of

reconstructing an image so that the image-size of said image is  $2^{2k}$  times the image-size of said reference-resolution image, close to the image-size of an image to be reproduced and output as a visible image; and

5           a zooming procedure is further provided for performing a zoom process on an image subjected to said predetermined image-processing, so that it becomes equal in size to the image-size of said output image.

10           29. The storage medium as set forth in claim 24, wherein said parameter calculating procedure is a procedure of calculating said image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

15           30. The storage medium as set forth in claim 25, wherein said parameter calculating procedure is a procedure of calculating said image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

20           31. The storage medium as set forth in claim 26, wherein said parameter calculating procedure is a procedure of calculating said image-processing parameter, based on the characteristic of said multiple-resolution transformation process.

25           32. The storage medium as set forth in claim 28, wherein said parameter calculating procedure is a procedure of calculating said image-processing parameter, based on the



characteristic of said multiple-resolution transformation  
process.